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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,702	04/02/2004	Gerhard Kordel	306.43720X00	9718
20457	7590	09/01/2005		
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER FISHMAN, MARINA	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/815,702	Applicant(s) KORDEL ET AL. 	
	Examiner Marina Fishman	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *General status*

1. This is a Final Action on the Merits. Claims 1 - 10 are pending in the case and are being examined.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simonsen [US 4,224,487] in view of Them [US 3,715,697].

Regarding Claims 1, 2, 6 and 7, Simonsen discloses a pyromechanical disconnecting apparatus for battery shutoff circuit breaker comprising:

- a housing [2];
- an electrically conductive bus [11] with a pre-determined cut position [15];
- a chisel [5] driven by pyrotechnic propellant charge [3];
- the conductor bus is clamped by a locking bolt (parts of the housing);
- a receiving space [17] in the locking bolt;
- when the conductor bus is severed by the chisel, the conductor bus is bent in the receiving space. The recess transpiciously

connects the receiving space with the atmosphere through channel [10].

Regarding Claim 1 - 10, Simonsen discloses the instant claimed invention except for the bolt is a part of the housing and not a separate unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a bolt as a separate unit, in order to simplify clamping of the conductive bus [11], since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. [Newin v. Erlichman, 168 USPQ 177, 179.]

Regarding Claims 3, 4, 8 and 9 Simonsen discloses the instant claimed invention except for "the recess covered by transparent material" and "the transparent material is glass or plastic." Them [Figure 3] discloses a device for cutting off a conductor, upon reaching a specified temperature. The device is provided with a transparent insulating plastic disc [33]. It would have been obvious to one of ordinary skill in the art the art the time the invention was made to provide a transparent plastic disc below the receiving space [17] in Simonsen, as suggested by Them, so that the condition of the conductor can be viewed [Them, column 3, lines 56-58].

Regarding Claims 5 and 10 Simonsen [Figure 1] discloses cross section of the recess [10] to be smaller than receiving space [17].

#### ***Response to Arguments***

4. Applicant's arguments filed 08/08/2005 have been fully considered but they are not persuasive.

5. The rejections in the previous office action under 35 USC §112, second paragraph and the Specification objections are withdrawn in view of Applicant's amendments.

6. The Applicant, has argued that Simonsen does not disclose a locking bolt. The Examiner, in the body of the rejection has already admitted to that fact. However, a part of the housing of Simonsen, acts as a bolt and as pointed out above, it would have been obvious to one of ordinary skill in the art to provide a housing and a separate bolt, in order to simplify the clamping of the conducting bus with a portion of the housing. Examiner is of the opinion that one of ordinary skill in that art would be motivated to simplifying the assembly of conducting bus with the portion of the housing. In addition, as pointed out before, the court (In re Erlichman) has already established that constructing a formerly integral structure into various elements involves only routine skill in the art and thus making the housing which was integral before, into two separate parts, a housing and a clamping bolt, would therefore, involve only a routine skill in the art.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2832


extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marina Fishman  
August 24, 2005



SPC-A42432  
09/01/05